App. No. 10/045,553
Reply to Office Action of October 24, 2003
Atty Ref. No.: P-10289.00 US

AMENDMENTS TO THE CLAIMS

The current claim set of the application is presented below. Indications as to the status of the claims ("original", "currently amended", "cancelled", "new", etc.) appear in parentheses after the claim number. Deletions are identified in bold with double brackets and strikethrough (e.g. **[[~~deletion~~]]**) and new text is identified in bold with underlining (e.g. **new language**).

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An implantable neurological stimulation lead with improved stylet handle, comprising:

a lead body having a body proximal end, a body distal end, and a stylet lumen;

at least one conductor contained in the lead extending from the body proximal end to the body distal end, the conductor being electrically insulated;

at least one electrical connector carried on the body proximal end and electrically connected to the conductor;

at least one electrode carried on the body distal end and electrically connected to the conductor;

a stylet wire configured for insertion into the stylet lumen to stiffen the lead body; and**[[,]]**

a stylet handle connected to the stylet wire, the stylet handle having a lead carrier and at least one gripper carried in the lead carrier configured to grip the lead body at **any [[a]]** selected point along the lead body **between the body distal end and the body [[~~or lead~~]]** proximal end.

2. (Original) The implantable neurological stimulation lead as in claim 1, wherein the selected point is any point along the lead body other than the lead body distal end.

3. (Original) The implantable neurological stimulation lead as in claim 1, further comprising a stylet stop in the lead distal end for the stylet wire to contact before the lead body is griped in the lead carrier.

4. (Original) The implantable neurological stimulation lead as in claim 1, further comprising a stylet release in the stylet handle, the stylet release having an engaged position where the stylet wire is coupled to the stylet handle and a disengaged position where the stylet wire is decoupled from the stylet handle creating a lead opening to permit the stylet handle to be moved toward the lead distal end without being encumbered by the stylet wire.

5. (Currently Amended) An implantable neurological stimulation lead with improved stylet handle, comprising:

a lead body having a body proximal end, a body distal end, and a stylet lumen;

at least one conductor contained in the lead extending from the body proximal end to the body distal end, the conductor being electrically insulated;

at least one electrical connector carried on the body proximal end and electrically connected to the conductor;

at least one electrode carried on the body distal end and electrically connected to the conductor;

a stylet wire configured for insertion into the stylet lumen to stiffen the lead body; and[[,]]

stylet handle [[**a**]] means for grasping the lead body selectively connected to the stylet wire, the means for grasping configured to grip the lead body at **any** [[**a**]] selected point along the lead body **between the body distal end and the body** [[~~or lead~~]] proximal end.

6. (Currently Amended) A stylet for an implantable neurological stimulation lead, comprising:

a stylet wire configured for insertion into a stylet lumen to stiffen a lead body; and[[,]]

a stylet handle connected to the stylet wire, the stylet handle having a lead carrier and at least one gripper carried in the lead carrier configured to grip the lead body at **any** [[**a**]] selected point along the lead body **between a distal end of the lead body and a proximal end of the lead body**.

7. (Original) The stylet as in claim 6, wherein the selected point is any point along the lead body other than the lead body proximal end.

8. (Original) The stylet as in claim 6, further comprising a stylet release in the stylet handle, the stylet release having an engaged position where the stylet wire is coupled to the stylet handle and a disengaged position where the stylet wire is decoupled from the stylet handle creating a lead opening to permit the stylet handle to be moved toward the lead distal end without being encumbered by the stylet wire.

9. (Currently Amended) A stylet for an implantable neurological stimulation lead, comprising:

a stylet wire configured for insertion into a stylet lumen to stiffen a lead body; and,

a means for grasping the lead body selectively connected to the stylet wire, the means for grasping configured to grip the lead body at **any** [[a]] selected point along the lead body **between a distal end of the lead body and a proximal end of the lead body**.

10. (Currently Amended) A method for inserting a stylet in a neurological stimulation lead, comprising:

aligning a stylet wire with a stylet lumen of a lead body proximal end;

inserting the stylet wire into the stylet lumen;

stopping insertion of the stylet wire when the stylet wire contacts a stylet stop in the stylet lumen of a lead body distal end;

inserting the lead body in a stylet handle lead carrier; and,

gripping the lead body **at any selected point along the lead body between a lead body distal end of and the lead body proximal end** with at least one gripper located in the stylet handle lead carrier while the stylet wire remains in contact with the stylet stop in the stylet lumen in the lead body distal end.

11. (Original) The method as in claim 10 wherein the gripping the lead body is performed on the lead body proximal end.

12. (New) The implantable neurological stimulation lead as in claim 1, wherein the lead carrier defines a channel-like recess to accommodate a portion of the lead body when the lead body is pushed laterally into the channel-like recess for engagement with the gripper.

13. (New) The implantable neurological stimulation lead as in claim 5, wherein the stylet handle means defines a channel-like recess to accommodate a portion of the lead body when the lead body is pushed laterally into the channel-like recess for engagement with the gripper.

14. (New) The stylet as in claim 6, wherein the lead carrier defines a channel-like recess to accommodate a portion of the lead body when the lead body is pushed laterally into the channel-like recess for engagement with the gripper.

15. (New) The stylet as in claim 9, wherein the means for grasping defines a channel-like recess to accommodate a portion of the lead body when the lead body is pushed laterally into the channel-like recess, and a gripper within the channel-like recess.

16. (New) The method as in claim 10, wherein the stylet handle defines a channel-like recess to accommodate a portion of the lead body and the gripper is located within the channel-like recess, and gripping the lead body further comprises pushing the lead body laterally into the channel-like recess for engagement with the gripper.

17. (New) A device for implanting a neurostimulation lead, the device comprising:

a stylet wire for insertion into a stylet lumen in a neurostimulation lead; and

a stylet handle connected to the stylet wire, the stylet handle having a lead carrier and at least one gripper carried in the lead carrier configured to grip the lead at a selected point along the lead, wherein the lead carrier defines a channel-like recess to receive the lead when the lead is pushed laterally into the channel-like recess, and the gripper includes one or more indentations that extend into the channel.

18. (New) The device of claim 17, wherein the indentations narrow a width of a portion of the channel.

19. (New) The device of claim 17, wherein the gripper is configured to grip the lead at a proximal end of the lead.

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20. (New) The device of claim 17, wherein the gripper grips the lead when the lead is pressed into the lead carrier.

21. (New) The device of claim 17, wherein the stylet handle includes a lead opening to accommodate the lead and permit the stylet handle to be moved toward a distal end of the lead.